

**ABSTRACT**

A digital subscriber line (DSL) driver allows a transmitter to monitor its own transmit spectrum at the subscriber loop and adjust the transmit spectrum based on detected line conditions, affected by the presence of bridged taps or any other impedance variations. The transmit spectrum is preferably equalized so that all carriers, or tones, transmit using the same power and exhibit the same margin. The invention is applicable to DMT and single carrier modulation formats.